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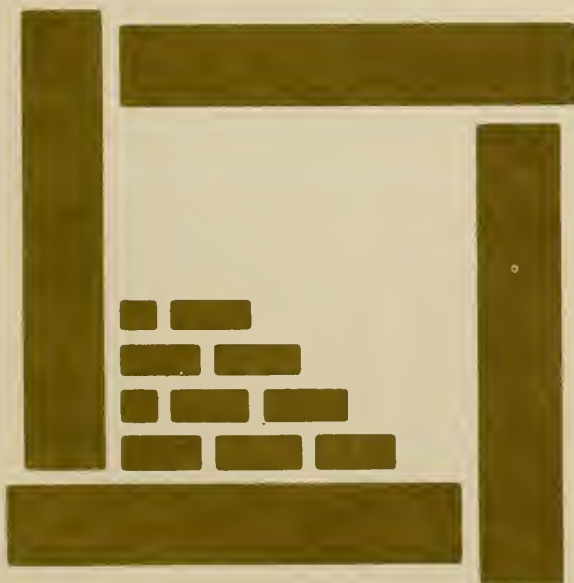
Census of Construction Industries

CC82-I-10

INDUSTRY SERIES

Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors

Industry 1711



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The publications
from the 1982 Economic and
Agriculture Censuses are dedicated
to the memory of Shirley Kallek,
Associate Director for Economic Fields.
During her career at the Bureau of the
Census (1955 to 1983), she continually
directed efforts to improve
the timeliness and accuracy of
economic statistics.



FINAL REPORT
INDUSTRY SERIES

1982 Census of Construction Industries

CC82-I-1 to 28
Changed October 1986

CHANGE SHEET

This revision is to table 4 in the original publications for Industry Series CC82-I-1 to 27 and table 8 for Industry Series CC82-I-28. In the stub, change 1982 (line 8) to read 1981 and 1981 (line 12) to read 1982.



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1982 Census of Construction Industries

CC82-I-10

INDUSTRY SERIES

Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors

Industry 1711

Issued November 1984



U.S. Department of Commerce
Malcolm Baldrige, Secretary
Clarence J. Brown, Deputy Secretary
Sidney Jones, Under Secretary for
Economic Affairs

BUREAU OF THE CENSUS
John G. Keane,
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BUREAU OF THE CENSUS

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CONSTRUCTION DIVISION

Leonora M. Gross, Chief

ACKNOWLEDGMENTS—Many persons participated in the various activities of the 1982 Census of Construction Industries. Primary direction of the program was performed by Shirley Kallek, Associate Director for Economic Fields (until May 1983), Charles A. Waite, her successor, and Michael G. Farrell, Assistant Director for Economic and Agriculture Censuses (until August 1984), and John H. Berry, his successor.

This report was prepared in the Construction Statistics Division under the general direction of Leonora M. Gross, Chief. Alan I. Blum, Assistant Division Chief for Industry Surveys, was responsible for the overall management of the census of construction industries. He guided the planning and implementation of the project and coordinated activities with other divisions.

A. William Visnansky supervised the preparation of this report. Barbara J. Hadden, Edward R. Glover, Otto G. Ricci, Marie Rustin-Sanhueza, and Shirley M. Baker made important contributions in such areas as developing specifications, procedures, and resolving problems.

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ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications¹ (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No.041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

METHOD OF ACCOUNTING AND TIME COVERED

For the census report, respondents could use any system of accounting by which they maintained their books. Therefore, reports could be based on cash, accrual, or completion of contract methods of accounting.

A report was supposed to cover the calendar year 1982. If that involved considerable costs, fiscal year reporting was permitted if it did not produce great differences. However, all payroll and employment figures had to be reported for the calendar year.

CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1982 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots as defined in the 1972 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

Contract construction—The SIC manual defines construction in three broad types of activity: (1) building construction by general contractors, (2) other construction by general contractors, and (3) construction by special trade contractors.

1. **Building construction by general contractors**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other projects of a similar character.
2. **Other construction by general contractors**—Often referred to as heavy construction contractors, these contractors are primarily engaged in the construction of highways, streets, bridges, and tunnels; docks and piers; dams and water projects; sewage collection, treatment, and disposal facilities; storm sewer systems; air fields; and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings.
3. **Construction by special trade contractors**—Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work, carpentry, etc.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Construction on their own account, for sale—Operative builders are primarily engaged in constructing buildings or other structures on their own account, acting as their own general contractor. These structures are generally sold when completed. Investment builders, primarily engaged in construction on their own account for rent or lease, were not included within the scope of the construction census.

Subdividers and developers, except cemeteries—The SIC manual defines subdividers and developers, except cemeteries, as establishments engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.

In this system, each establishment is assigned an industry code on the basis of its major activity.

Each establishment receiving a questionnaire was requested to report the percent of total business receipts for each kind-of-business activity engaged in during 1982. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction receipts to total business receipts was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities, but in only a few instances do the SIC industry categories take into consideration combinations of activities. An example is SIC 1711, which includes establishments primarily engaged in plumbing, heating, air conditioning, ventilation, and refrigeration work. It is necessary, however, to assign a single industry code to the establishment based on its major activity.

Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities.

The structure of the Standard Industrial Classification System makes it possible to classify or tabulate establishments by major group (two-digit), industry group (three-digit), or industry (four-digit) according to the degree of detail available and needed.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business which has been established for the management of more than a single project or job and is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to, estimating, bidding, scheduling, purchasing, supervising, and operating the actual construction work being conducted at one or more construction sites.

Exceptions to the "relatively permanent office" rule were that: (1) in case of joint ventures, a separate establishment report was required covering the joint venture entity even though established to undertake only a single project; and (2) to the extent that separate legal entities were set up to carry out only a given project or part of a project, then a separate establishment report was also required for each legal entity.

To the extent that several companies shared or operated out of a single office or place of business, each such legal entity engaged in construction was considered a separate establishment and each was requested to file the necessary "establishment" report covering the activities it conducted in or from that common office.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1982.

Separate construction reports were not required for each project or construction site. Aggregated information was included in the report of the construction establishment responsible for the work of the construction projects and sites.

If an establishment engaged in two or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, construction, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1982 gross receipts from construction activities exceeded the gross receipts from each of its other activities.

An establishment is not necessarily identical with a "company" or "enterprise," which may consist of one or more establishments. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

Construction businesses with no payroll during 1982 (nonemployers) were not required to file census reports. Collection and tabulation of data for these businesses are described in the section on "Sample Design." Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The firms included in the 1982 Census of Construction Industries were identified as part of an operation common to all 1982 Economic Censuses. Construction firms were divided into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government based on information supplied directly to the agencies.

Employer Firms

Developing the sampling frame for employer firms—This operation started with obtaining a list of all construction firms in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of firms engaged in business activities in the United States. The file contains the name, address, and form of ownership of each firm and also indicates whether or not the firm is subject to the Federal Insurance Contributions Act. Each firm in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each firm. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer firms. However, for the 1982 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those firms which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment firms and large single-establishment firms. Thus, the 1982 Economic Census list for single-establishment employer firms was obtained from the IRS-SSA, but the list of establishments of multi-establishment employer companies was obtained directly from those companies in the COS.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a firm to the proper economic census, but there were a number of firms for which this information was inadequate or unavailable. A special form, NC-9923, General Report, was mailed to all such firms, requesting information on the nature of the firm's activities. From the information reported, the firm was given an industrial classification code and assigned to the appropriate economic census. Since construction firms found in this way were identified as such, only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

For 1982, some data will be published for Standard Consolidated Statistical Areas (SCSA's) and selected Standard Metropolitan Statistical Areas (SMSA's). Therefore, each establishment was assigned to an SMSA code or to the balance of a State. The balance of the State was considered to be a separate cell for the selection process. In States where none of the SMSA's had more than 500,000 inhabitants in the 1970 Decennial Census, all establishments were assigned to the balance of the State.

Selecting the employer sample—A construction universe of about 464,000 single establishment employer firms and 6,500 multiestablishment employers, accounting for another 13,000 construction establishments, was developed by the procedures described above. From this universe, a sample of 172,000 employer establishments was selected. This sample was generally organized by standard industrial classification (SIC) in State sequence. The sample was designed to provide publishable estimates for the most construction industries at the State and selected SMSA level. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with the payroll equivalent of 20 employees or more, and a sample of single-establishment companies with less than 20 employees. There were three SIC's for which this standard plan was not used: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

The number of establishments classified in each of these three industries is very small and consequently, all single-unit establishments in these three industries were included in the sample. For sampling purposes, the number of employees was estimated from the 1981 payroll data in the administrative records, using an industry average wage per employee. The sampling was accomplished using a systematic method within each four-digit SIC. If the SIC code for an establishment was not complete, it was sampled as part of a two-digit group (e.g., 1520 was sampled as 1500, 1620 as part of 1600) except for non-classifiable cases in two-digit group 17. These were sampled as part of 1799 which is Special Trade Contractors, Not Elsewhere Classified. For the establishments with less than 20 employees, the sample was selected by sorting the establishments into State by SMSA by SIC by payroll sequences, and drawing a systematic sample of at least two establishments within each cell, with the probability of selection being proportional to the 1981 payroll. If the State-SMSA-SIC cell had two or less establishments in the frame, all establishments were selected (a 100-percent sample). A 100-percent sample was taken of the construction firms identified from the NC-9923, General Report, and of the transfers from other census trade areas. These latter cases were identified during the processing stages. These were caused either by changes of activity in the firm since the last updating of the classification file, or errors in the mailout classification. These cases were all added to the construction census, with certainty.

Estimation procedures for 1982 and 1977 data—Since all larger employer firms and some smaller ones were included in the census, sample estimation was required only for the universe of firms not selected with certainty. The published statistics are the totals of the estimates for the sampled firms and the

aggregates for the certainty (larger) firms. All estimates for 1982 and 1977 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c}$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

This method of estimation was used for all 1982 and 1977 characteristics. Before this formula was applied, it was necessary to convert into dollars those distributions of construction receipts which had been reported by the establishments as percentages—construction receipts by type of project, location of project, etc.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimates directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Although relative standard errors have been calculated for all of the published statistics, they are shown for each statistic only in the tables presenting detailed statistics. The other tables show relative standard errors only for some characteristics because of lack of space.

Separate measures of reporting and processing errors are not available. However, estimates which were subject to large errors of these types are likely to have been detected and corrected, or withheld from publication in the process of the review of the data for reasonableness and consistency. Other specific qualifications of the published data are indicated in footnotes to the tables.

The statistics in this report were based on data received by the time of final publication. Data were imputed for

establishments that did not report by that date. Selected establishments were contacted again to obtain as much information on the telephone as possible. Late data received in early 1984 were substituted for imputed data when the difference between the two was significant. Some publication cells in which more than 50 percent of the data were imputed have been suppressed.

Nonemployer Firms

General—As described earlier, the information derived from the business income tax returns of all firms was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with firms without payroll were treated as nonemployers. The nonemployer construction firms were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return. In 1982, this group accounted for 60 percent of the total number of construction establishments, but accounted for only 8 percent of all business receipts of all construction establishments.

Qualifications to the nonemployer data—Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1982 Census of Construction Industries was obtained from employer establishments primarily through the use of eight questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the three two-digit SIC groups (15, 16, and 17), and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted most of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were solicited from construction trade associations and appropriate advisory groups. The Census Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

DATA PROCESSING

The 1982 census report forms were mailed out in December 1982. Collection of these report forms, also by mail, was essentially completed in July 1983. They were mailed from and

returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters in Washington, D.C.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding) and imputation for missing items or for the small number of reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1982 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. Separate State codes were assigned based on this information.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected SCSA's and SMSA's.

DUPLICATION IN RECEIPTS

The aggregate of construction receipts reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted to other construction firms and also be included in the subcontractors' receipts. To avoid this duplication, a "net construction receipts" figure has been derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts.

Duplication in receipts between other construction and non-construction industries results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is

defined in the 1982 Census of Construction Industries as equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, value added is defined as equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies), as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, D.C., 20233.

To discuss a special tabulation before submitting specifications, call 301-763-5435.

RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS

The Census Bureau also conducts current surveys (monthly, quarterly, and annually) to keep abreast of the rapid changes in business conditions, new processes, new materials, and shifting demands of goods and services. The census universe provides the sampling frame, weights, and benchmarks on which some of these current surveys are based. The accuracy of the measures derived from these current surveys is directly related to the completeness of information provided in the censuses.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1982 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas, the construction census figures cover both new construction and

maintenance and repair work, but only for establishments classified in the construction industry. Force account construction activity—construction work performed by the labor force of a nonconstruction company for itself, or by other entities (Federal, State, or local governments) for themselves, or by property owners for themselves—probably accounts for more than half of the difference in the data of the two series of reports. Other factors contributing to the difference are that the census data do not include: (1) the value of materials supplied by the owners of projects, (2) the value of separate architectural and engineering services and, to a lesser extent, (3) the value of construction work performed for others by firms outside the scope of construction (manufacturers who install, lumber yards and other businesses, etc.).

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology. Their effect is not fully known.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** All employees (average) is the sum of construction workers during pay period including 12th of March, May, August, and November divided by 4, added to all others, March 12th.
- Represents zero.
- † Represents total construction receipts less payments for construction work subcontracted to others. (See Duplication in Receipts.)
- †† Represents all business receipts less payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from "all business receipts." (See Duplication in Receipts.)
- ‡ Possible duplication in data. (See Duplication in Receipts.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employ- ment size	By receipts size	By type, class, ownership, kind of business, and location of construction ¹	By speciali- zation in types of construction
Assets and depreciation (gross book value):						
Beginning of year—structures, machinery and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—structures, machinery and equipment	3					
Depreciation charges during the year— structures, machinery and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New structures—machinery and equipment	3					
Used structures—machinery and equipment	3					
Communication services, payments for	2					
Employees:						
All employees—average number	1, 2	1	5	6		8
Construction workers—average number	1, 2, 9					
Other employees—March	2					
Employer costs for fringe benefits—legally required and voluntary expenditures	2					
Establishments:						
Number in business at end of year	2					
Number in business during the year	1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers:						
Total	1, 2, 9	1, 9	5	6		
Quarterly	2, 9	9				
Inventories	4					
Materials, components, supplies, and fuels— payments for	1, 2	1	5	6		
Payroll:						
First quarter, all employees	2					
Annual:						
All employees	1, 2	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—payments for	2					
Profile of the industry—selected industry averages	12					
Proprietors and working partners	2					
Ratios, State	13	13				
Receipts:						
All business receipts	2		5	6	11	
Construction receipts, total	1, 2, 4	1	5	6	2, 7, 10	8
For work subcontracted in from others	2					
Other business receipts and land receipts ²	2					
Net construction receipts	1, 2	1	5	6		8
Value added	1, 2	1	5	6		8
Rental payments:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For structures	2					
Repairs to structures and related facilities	2					
Repairs to machinery and equipment	2					
Storage capacity for fuels ³	2					
Subcontract work to others, payments for	1, 2	1	5	6		8

Note: Data for 1977 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction or maintenance and repair work. Ownership—private or government owned.

²Other business receipts and land receipts are shown separately for SIC's 1531 and 6552 only.

³Storage capacity for fuels shown only for SIC's 1611, 1622, 1623, and 1629.

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Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors

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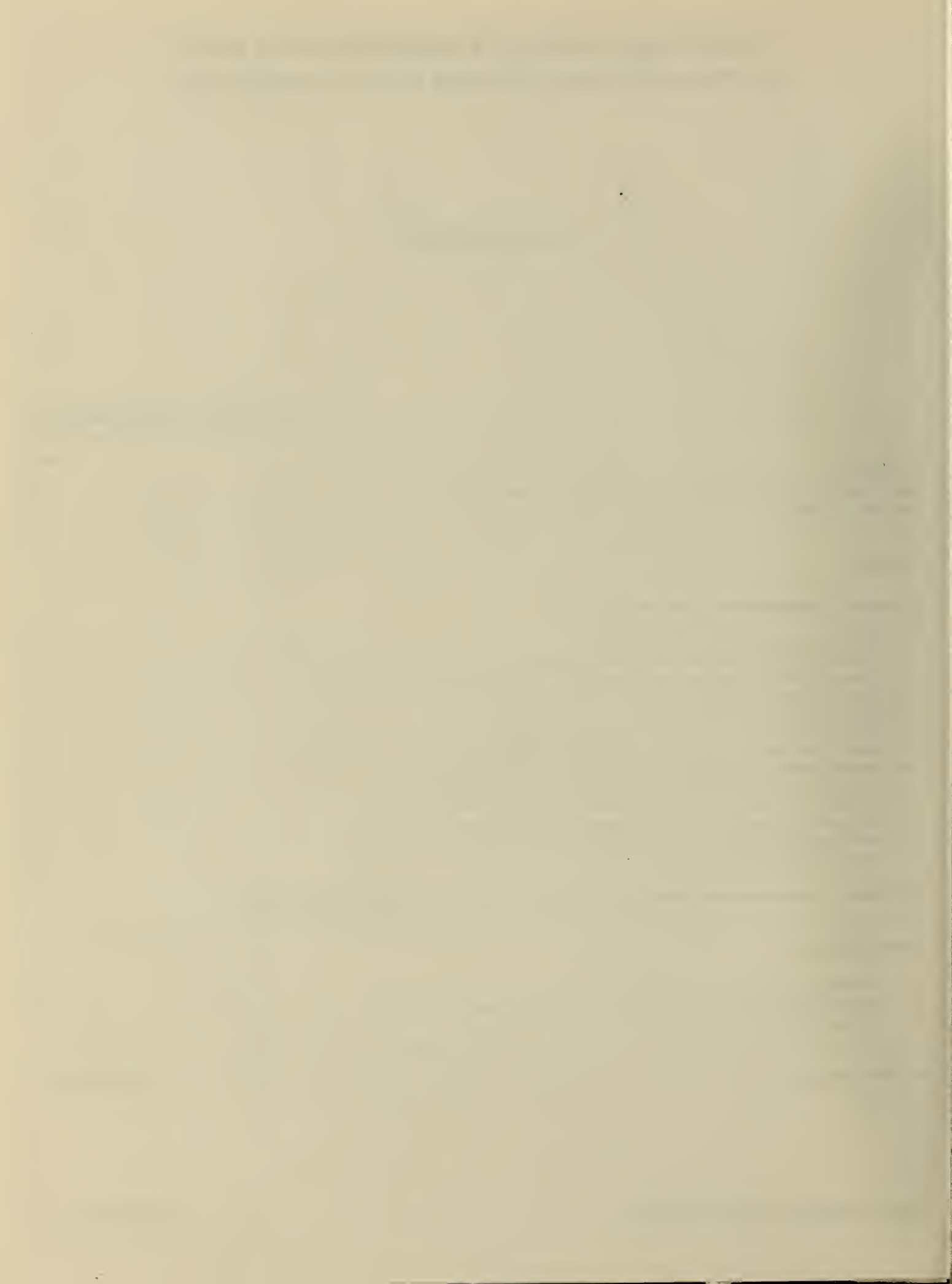
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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in plumbing, heating (except electric), or air conditioning work or any combination of these types of work. Sheet metal work combined with any of these types of work is included in this industry, but roofing and sheet metal contractors are classified in industry 1761. For specific examples, refer to the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.¹

During 1982, there were 60,243 establishments with payroll classified in this industry.² All business receipts of these establishments amounted to \$33.5 billion, of which \$32.7 billion were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$3.8 billion, leaving net construction receipts of about \$28.8 billion. Value added for 1982 was \$17.0 billion. (See Introduction and appendixes for explanation of terms.)

The establishments in this industry made payments of \$12.2 billion for materials, components, and supplies purchased for use in construction work for others, purchased and subsequently provided to subcontractors for their use, purchased and then resold to others, and purchased and used in construction work for their own account. However, materials furnished to contractors by owners of projects are, of course, not included. Payments of \$579 million were also made for selected power, fuels, and lubricants purchased during the year from other companies or received from other establishments of the parent company.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

²Limited data for establishments in this industry without payroll (nonemployers) will be included in the U.S. industry summary report to be published after the individual industry reports have been issued.

Establishments with 10 employees or more, while representing only 20 percent of the total number of employer establishments in this industry, accounted for 75 percent of all business receipts.

Total average employment in the industry showed an increase of 12 percent from 1977 to a total of 512 thousand employees. Total payroll for 1982 amounted to \$9.9 billion. Hours worked by construction workers during the first quarter of 1982 were 158 million hours, while hours worked during the third quarter were 170 million hours.

Payments of \$1.8 billion for employer costs for fringe benefits (not included in payroll) represent expenditures during the year for legally required and voluntary fringe benefit programs for employees—such as employers' Social Security contributions, unemployment compensation, pension plans, and welfare plans.

The 1982 estimates for establishments with payroll in all of the construction industries are based on a probability sample consisting of about 23,100 construction establishments. The estimates for this particular industry are based on a sample of about 8,300 establishments.

The statistics reported by each establishment cover all of its activities, not just construction. Therefore, aggregates of such data for an industry reflect not only the primary construction activities of the establishments in the industry, but also their secondary construction activities and any nonconstruction activities.

All data shown are based on current dollars for the years specified and have not been adjusted for price changes or inflation between 1977 and 1982.

Table 1. General Statistics for Establishments With Payroll by State: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1982							
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Total construction receipts	Net construction receipts†
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States -----	60 243	512 004	397 548	9 860 690	7 476 808	655 847	32 661 277	28 846 061
Alabama -----	819	6 020	4 762	88 771	67 166	7 984	325 998	293 928
Alaska -----	138	1 876	1 457	42 506	32 212	1 589	150 235	127 483
Arizona -----	876	7 738	5 915	138 593	104 104	9 988	451 715	418 491
Arkansas -----	602	3 486	2 756	48 488	38 618	4 587	185 763	164 838
California -----	5 273	50 766	38 130	1 146 423	851 715	53 586	3 591 253	3 249 205
Colorado -----	1 143	9 633	7 576	191 375	148 082	12 583	648 347	551 185
Connecticut -----	965	7 151	5 565	152 233	116 170	9 614	470 383	412 657
Delaware -----	203	3 351	2 818	76 382	66 484	4 920	153 302	140 803
District of Columbia -----	69	1 043	792	19 373	12 615	1 156	62 795	58 260
Florida -----	3 420	33 580	26 919	553 422	432 106	48 119	1 867 327	1 693 157
Georgia -----	1 427	12 195	9 702	188 330	138 373	16 078	728 023	642 412
Hawaii -----	183	2 111	1 548	43 632	32 434	2 485	135 656	126 190
Idaho -----	278	1 680	1 269	28 367	22 420	1 988	110 891	101 068
Illinois -----	2 794	23 125	17 733	537 075	416 443	27 910	1 541 560	1 384 021
Indiana -----	1 334	11 663	8 943	235 881	180 736	14 289	727 302	628 872
Iowa -----	916	4 866	3 633	83 846	62 778	5 728	275 525	246 524
Kansas -----	809	5 771	4 345	97 285	73 228	6 518	324 715	290 923
Kentucky -----	895	6 748	5 308	115 137	87 647	9 391	399 518	353 508
Louisiana -----	1 071	8 945	7 227	161 835	124 906	11 924	560 840	494 608
Maine -----	314	1 719	1 340	25 258	18 779	2 421	98 176	86 590
Maryland -----	1 307	13 818	10 672	247 607	177 587	18 146	906 312	760 787
Massachusetts -----	1 636	11 567	8 829	223 704	165 922	15 077	770 737	678 748
Michigan -----	1 782	13 228	10 019	279 866	211 774	15 928	928 916	774 589
Minnesota -----	1 119	10 015	7 590	240 320	183 811	12 364	702 332	597 109
Mississippi -----	511	3 451	2 883	48 035	40 136	5 148	177 164	158 665
Missouri -----	1 245	10 404	8 003	213 236	164 964	12 786	699 100	612 632
Montana -----	236	1 046	774	19 867	14 979	1 218	75 221	62 461
Nebraska -----	550	3 264	2 431	56 174	40 743	4 164	191 334	173 503
Nevada -----	295	2 367	1 831	52 713	40 943	2 784	182 946	157 869
New Hampshire -----	271	1 582	1 175	27 046	19 890	2 113	102 623	88 745
New Jersey -----	2 344	18 076	14 155	382 240	290 977	23 601	1 214 186	1 065 244
New Mexico -----	455	3 079	2 410	46 052	35 984	3 731	168 361	147 550
New York -----	3 938	32 610	24 966	641 304	483 319	41 517	2 260 551	1 949 250
North Carolina -----	1 905	16 306	13 149	238 907	180 556	23 161	802 393	736 930
North Dakota -----	194	1 610	1 297	34 857	28 952	2 211	115 086	102 043
Ohio -----	2 505	21 071	15 882	450 236	342 638	25 985	1 334 521	1 168 784
Oklahoma -----	1 015	6 837	5 463	121 564	93 825	8 950	440 469	399 648
Oregon -----	636	3 794	2 777	82 867	60 920	4 088	255 820	223 101
Pennsylvania -----	2 908	27 493	21 410	566 951	434 831	34 873	1 848 767	1 620 578
Rhode Island -----	261	1 585	1 242	26 962	19 874	1 942	106 262	84 596
South Carolina -----	845	8 370	6 611	122 943	88 643	11 907	404 968	369 451
South Dakota -----	176	1 002	781	14 676	10 805	1 218	55 265	48 468
Tennessee -----	978	8 376	6 739	133 840	99 651	11 576	486 141	435 407
Texas -----	4 519	46 817	37 170	842 925	631 952	65 174	3 084 571	2 755 502
Utah -----	452	3 348	2 642	66 676	52 529	4 412	254 668	208 626
Vermont -----	171	827	659	11 326	8 207	1 095	44 617	39 354
Virginia -----	1 532	14 097	11 074	219 900	159 837	19 861	749 339	663 193
Washington -----	922	7 245	5 206	170 336	127 130	7 900	586 535	494 252
West Virginia -----	322	2 235	1 788	36 222	28 278	3 039	102 688	96 593
Wisconsin -----	1 470	11 798	9 213	247 813	194 539	15 442	733 477	650 230
Wyoming -----	199	1 201	953	19 297	15 577	1 574	66 564	57 415

1982—Con.						1977			Relative standard error of estimate (percent) for column—			Location of establishment
Value added††	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Rental payments for machinery, equipment, and structures	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
16 961 501	12 744 723	3 815 215	364 921	438 977	4 577 811	458 687	21 072 098	10 681 068	(W)	(W)	(W)	U.S.
150 337	147 744	32 070	3 062	4 890	60 056	8 826	304 385	148 076	4	3	7	Ala.
74 557	62 787	22 752	1 187	2 197	18 915	1 006	74 189	42 195	4	6	6	Alaska
230 035	196 168	33 224	5 969	7 813	63 866	4 962	215 644	111 807	3	3	5	Ariz.
88 143	79 353	20 925	1 930	2 572	35 512	3 704	163 331	68 015	6	5	10	Ark.
2 057 293	1 289 013	342 047	52 542	46 929	496 972	42 111	2 272 045	1 255 944	1	(W)	2	Calif.
364 504	259 990	97 162	8 071	7 802	76 190	6 966	315 302	155 978	2	2	3	Colo.
263 047	172 147	57 726	4 854	4 956	60 248	5 743	268 540	137 349	3	2	4	Conn.
108 739	33 524	12 498	2 011	1 267	12 892	3 374	109 756	77 695	3	3	7	Del.
33 675	(D)	4 534	705	727	8 974	1 391	66 108	40 440	6	5	4	D.C.
918 290	837 778	174 170	20 239	26 626	266 598	21 809	825 354	403 149	1	1	2	Fla.
319 918	330 234	85 610	7 434	9 167	95 070	12 126	449 778	213 030	3	2	4	Ga.
84 487	45 121	9 465	2 190	1 353	21 240	1 731	87 336	50 473	5	4	10	Hawaii
58 611	47 971	9 823	1 047	1 534	18 347	1 843	93 470	43 273	8	11	11	Idaho
870 934	540 470	157 538	16 517	18 461	244 357	23 431	1 216 157	658 639	1	1	2	Ill.
381 742	267 981	98 429	8 903	8 921	97 341	11 828	532 152	281 171	2	2	3	Ind.
141 380	111 569	29 001	3 042	3 592	58 962	6 703	328 283	155 158	4	3	6	Iowa
165 659	136 319	33 792	3 771	3 847	51 430	5 507	233 678	118 589	5	3	7	Kans.
199 829	157 791	46 009	4 237	6 786	66 230	6 653	274 890	137 626	3	2	5	Ky.
273 642	229 627	66 232	5 608	8 866	87 731	8 825	388 423	189 489	3	2	4	La.
49 556	40 015	11 586	981	994	12 959	1 579	60 910	31 161	8	7	11	Maine
430 865	342 627	145 525	9 397	12 746	106 434	12 309	549 142	260 151	2	1	2	Md.
413 530	285 595	91 988	7 273	8 972	90 161	9 829	447 992	219 753	2	2	3	Mass.
468 144	331 312	154 327	10 645	11 647	133 467	15 684	864 266	436 163	2	1	3	Mich.
347 567	265 877	105 223	8 538	11 832	108 385	8 394	424 172	205 772	2	2	2	Minn.
89 534	75 014	18 499	1 740	3 027	30 525	3 392	125 767	60 092	5	5	4	Miss.
378 759	243 990	86 468	6 570	6 561	101 535	10 776	529 245	275 509	2	1	3	Mo.
34 035	31 637	12 759	907	717	15 379	1 705	77 480	41 089	9	9	12	Mont.
96 188	86 408	17 831	2 124	2 322	32 265	3 910	193 934	89 661	5	4	10	Nevr.
105 279	69 785	25 077	2 603	3 097	25 987	1 898	108 916	57 494	4	3	8	Nev.
46 856	45 803	13 878	993	1 170	15 005	1 468	58 846	31 084	8	6	11	N.H.
662 471	416 614	148 941	10 033	14 464	140 662	13 645	656 498	331 224	1	1	3	N.J.
79 865	72 752	20 811	1 778	2 834	28 422	2 641	100 017	50 127	6	6	8	N. Mex.
1 182 317	796 145	311 301	18 732	27 089	306 481	25 491	1 204 830	648 666	1	1	2	N.Y.
403 470	349 631	65 463	9 012	13 434	118 784	14 908	501 398	238 921	2	2	2	N.C.
55 671	47 611	13 043	695	1 064	15 692	1 627	71 144	37 319	6	4	10	N. Dak.
738 110	454 001	165 737	15 467	14 699	185 240	22 725	1 120 852	572 207	1	1	2	Ohio
217 786	189 501	40 821	4 618	6 596	65 880	5 846	257 501	121 609	4	3	9	Okla.
135 783	95 941	32 719	3 993	2 981	35 699	4 501	251 818	132 877	4	3	8	Oreg.
970 461	678 509	228 189	21 885	24 163	233 132	22 338	1 069 739	532 259	1	1	2	Pa.
43 654	42 111	21 666	809	781	11 932	1 569	81 856	38 477	7	6	12	R.I.
196 737	182 978	35 517	3 155	6 657	67 320	7 426	244 573	114 077	3	2	5	S.C.
24 813	26 025	6 797	586	914	15 338	1 215	49 353	27 301	10	9	19	S. Dak.
231 245	218 648	50 734	4 451	7 318	84 758	8 998	360 532	156 294	3	3	8	Tenn.
1 486 630	1 361 815	329 069	34 952	51 358	380 419	35 928	1 601 890	761 578	1	1	2	Tex.
117 271	95 509	46 042	4 168	4 371	40 186	3 106	157 109	74 790	5	4	5	Utah
20 981	(D)	5 263	522	934	5 913	803	28 701	13 020	10	11	13	Vt.
378 436	334 212	86 146	8 139	10 709	105 391	13 194	484 201	240 239	2	2	4	Va.
303 615	210 865	92 283	7 708	6 059	72 197	8 301	460 424	240 738	2	2	5	Wash.
56 930	43 816	6 094	1 108	1 368	20 820	2 051	80 619	49 468	6	5	11	W. Va.
377 945	292 396	83 247	6 928	9 057	117 934	11 895	587 307	282 979	2	1	3	Wis.
32 153	27 758	9 149	1 072	715	12 558	998	42 257	20 886	10	7	15	Wyo.

Table 2. Detailed Statistics for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
Number of establishments in business during year	60 243	56 435	53 301	47 515	1	1	1	2
Number of establishments in business at end of year	58 738	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Proprietors and working partners	19 761	28 698	30 746	33 815	2	2	2	2
All employees**	512 004	458 687	456 100	369 131	(W)	(W)	1	1
Construction workers:								
March	381 815	341 167	342 751	285 869	(W)	(W)	1	1
May	390 306	367 815	361 099	297 390	(W)	(W)	1	1
August	407 130	386 712	385 330	320 701	(W)	(W)	1	1
November	388 931	378 311	376 386	308 118	(W)	(W)	1	1
Average	397 548	368 993	371 113	306 923	(W)	(W)	1	1
Other employees:								
March	114 266	86 771	82 782	61 094	1	1	1	1
Construction worker hours (thousands):								
January to March	158 097	(NA)	(NA)	(NA)	(W)	(NA)	(NA)	(NA)
April to June	163 328	(NA)	(NA)	(NA)	(W)	(NA)	(NA)	(NA)
July to September	170 170	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
October to December	164 250	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Total hours worked	655 847	(NA)	(NA)	(NA)	(W)	(NA)	(NA)	(NA)
Payroll, all employees	9 860 690	6 413 961	4 787 958	2 844 740	(W)	(W)	1	1
Payroll, construction workers	7 476 808	5 024 679	3 809 878	2 307 043	(W)	(W)	1	1
Payroll, other employees	2 383 881	1 389 282	978 080	537 803	(W)	(W)	1	1
First quarter payroll, all employees	2 322 105	1 401 612	(NA)	(NA)	(W)	(W)	(NA)	(NA)
Employer costs for fringe benefits	1 792 827	1 191 833	(NA)	(NA)	(W)	(W)	(NA)	(NA)
Legally required expenditures	1 344 811	613 373	(NA)	(NA)	(W)	(W)	(NA)	(NA)
Voluntary expenditures	448 015	578 461	(NA)	(NA)	(W)	(W)	(NA)	(NA)
All business receipts	33 521 439	21 431 185	15 615 468	10 058 953	(W)	(W)	1	1
Total construction receipts	32 661 277	21 072 098	15 321 135	9 932 963	(W)	(W)	1	1
Receipts for work subcontracted in from others	14 977 848	10 895 292	6 618 199	4 032 889	(W)	(W)	1	1
Land receipts ¹	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts	860 162	359 087	294 333	127 043	1	2	2	1
Net construction receipts†	28 846 061	19 135 815	13 594 125	8 766 968	(W)	(W)	1	1
Value added††	16 961 501	10 681 068	7 794 530	4 758 236	(W)	(W)	1	1
Selected payments	16 559 938	10 750 117	7 820 938	5 300 771	(W)	(W)	1	1
Materials, components, and supplies ²	12 165 599	8 495 261	6 093 928	4 134 327	(W)	(W)	1	1
Construction work subcontracted to others	3 815 215	1 936 282	1 727 010	1 166 153	(W)	(W)	1	1
Selected power, fuels, and lubricants	579 123	318 575	(NA)	(NA)	1	1	(NA)	(NA)
Electricity	83 116	41 281	(NA)	(NA)	1	1	(NA)	(NA)
Natural gas	29 861	26 118	(NA)	(NA)	1	1	(NA)	(NA)
Gasoline and diesel fuel (including gasohol)	434 274	227 035	(NA)	(NA)	1	1	(NA)	(NA)
Other, including lubricating oils and greases	31 872	24 142	(NA)	(NA)	2	1	(NA)	(NA)
Storage capacity for fuels ³ (thousand gallons)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Rental payments for machinery, equipment, and structures	364 921	184 692	(NA)	(NA)	1	1	(NA)	(NA)
For machinery and equipment	191 898	107 612	59 520	26 062	1	1	3	2
For structures	173 022	77 080	(NA)	(NA)	1	1	(NA)	(NA)
Selected purchased services	392 979	259 566	(NA)	(NA)	1	2	(NA)	(NA)
Communication services	186 256	117 679	(NA)	(NA)	1	3	(NA)	(NA)
Repairs to structures and related facilities	37 877	18 505	(NA)	(NA)	1	2	(NA)	(NA)
Repairs to machinery and equipment	168 844	123 383	(NA)	(NA)	1	3	(NA)	(NA)
Ownership of construction projects:								
Total construction receipts	32 661 277	21 072 098	15 321 135	9 932 963	(W)	(W)	1	1
Government owned	4 684 376	3 194 485	3 545 137	2 496 904	2	(W)	1	1
Privately owned	27 976 900	17 877 613	11 775 998	7 436 059	(W)	(W)	1	1

¹Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

²For 1967 and 1972, includes data for power, fuels, and lubricants.

³Data were collected only for establishments classified as heavy construction contractors.

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
STRUCTURES, MACHINERY, AND EQUIPMENT								
Beginning-of-year gross book value of depreciable assets -----	4 273 764	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	438 977	381 862	222 285	107 071	1	1	2	2
New -----	339 166	316 313	182 469	84 410	1	1	2	2
Used -----	99 810	85 549	39 818	22 661	2	3	6	5
Retirements and disposition of depreciable assets -----	134 930	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	4 577 811	2 222 820	1 498 811	(NA)	1	1	2	(NA)
Depreciation charges during year -----	708 686	238 826	176 313	(NA)	1	1	3	(NA)
Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets -----	1 084 222	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	75 540	54 034	59 531	26 271	2	6	8	6
New structures and related facilities -----	58 297	41 493	37 960	15 650	2	5	7	4
Used structures and related facilities -----	17 243	12 541	21 571	10 621	6	8	9	8
Retirements and disposition of depreciable assets -----	25 844	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	1 133 918	579 917	421 862	(NA)	1	1	2	(NA)
Depreciation charges during year -----	118 108	33 001	32 844	(NA)	2	2	3	(NA)
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets -----	3 189 541	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	363 436	327 828	162 754	80 800	1	2	3	3
New machinery and equipment, including automobiles and trucks -----	280 869	274 820	144 509	68 760	1	1	2	1
New automobiles and trucks, intended primarily for highway use -----	163 871	183 498	(NA)	(NA)	1	1	(NA)	(NA)
Used machinery and equipment, including automobiles and trucks -----	82 567	53 008	18 245	12 040	2	3	4	5
Retirements and disposition of depreciable assets -----	109 085	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	3 443 892	1 642 903	1 076 949	(NA)	1	1	3	(NA)
Depreciation charges during year -----	590 578	205 825	143 469	(NA)	1	1	4	(NA)

Table 4. Value of Inventories for Establishments With Payroll: 1982 and 1981

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	60 243	1
Total construction receipts	32 661 277	(W)
Establishments with inventories:		
Number	30 543	1
Total construction receipts	22 098 350	(W)
Inventories¹:		
End of 1982, total	936 064	1
Value for establishments with LIFO reserve	47 289	4
Amount of LIFO reserve	15 159	3
Value for establishments with no LIFO reserve	888 775	1
End of 1981, total	925 493	1
Value for establishments with LIFO reserve	51 180	3
Amount of LIFO reserve	14 872	4
Value for establishments with no LIFO reserve	874 313	1
Establishments with no inventories:		
Number	29 700	1
Total construction receipts	10 562 927	1

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Establishments with an average of—									
	Total	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1982										
Number of establishments -----	60 243	35 477	12 934	7 002	3 605	769	364	64	18	9
All employees** -----	512 004	73 702	85 191	93 609	106 875	51 817	52 987	21 413	11 926	14 482
Payroll, all employees -----	9 860 690	844 266	1 281 397	1 698 980	2 208 545	1 249 805	1 359 440	560 608	291 891	365 756
Construction worker hours (thousands) -----	655 847	88 125	99 664	114 286	138 552	70 592	75 854	30 436	17 574	20 759
All business receipts -----	33 521 439	3 846 989	4 525 869	5 650 562	7 449 385	4 384 659	4 395 955	3 268 019	(D)	(D)
Total construction receipts -----	32 661 277	3 782 197	4 407 025	5 505 201	7 281 937	4 228 357	4 311 329	1 646 948	698 675	799 606
Net construction receipts† -----	28 846 061	3 563 611	4 119 091	4 986 066	6 368 666	3 568 461	3 591 545	1 369 831	593 276	685 513
Value added†† -----	16 961 501	1 902 801	2 349 997	2 917 435	3 654 402	2 130 008	2 166 772	924 110	456 080	459 893
Payments for materials, components, supplies, and fuels -----	12 744 723	1 725 602	1 887 937	2 213 991	2 881 711	1 594 754	1 509 398	931 326	(D)	(D)
Payments for construction work subcontracted to others -----	3 815 215	218 586	287 934	519 135	913 271	659 896	719 784	277 117	105 399	114 093
Rental payments for machinery, equipment, and structures -----	364 921	43 476	55 882	63 964	80 390	39 354	48 270	17 564	9 197	6 823
Capital expenditures, other than land -----	438 977	69 067	72 591	76 234	96 256	53 457	38 559	15 391	5 844	11 575
End-of-year gross book value of depreciable assets -----	4 577 811	902 356	843 303	885 979	899 332	419 472	363 860	130 199	58 731	74 576
1977										
All employees** -----	458 687	67 480	77 679	93 801	97 840	50 774	32 511	22 084	8 980	7 538
Total construction receipts -----	21 072 098	2 750 174	3 024 928	4 043 731	4 842 470	2 747 626	1 779 143	1 218 456	408 268	257 303
Value added†† -----	10 681 068	1 399 160	1 569 489	2 082 269	2 462 569	1 336 351	845 490	602 315	217 745	165 682
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** -----	(W)	1	2	1	1	(W)	(W)	(W)	(W)	(W)
Net construction receipts† -----	(W)	1	2	1	(W)	(W)	(W)	(W)	(W)	(W)
Capital expenditures, other than land -----	1	4	4	2	1	(W)	(W)	(W)	(W)	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics for Establishments With Payroll by Receipts Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with all business receipts of—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1982											
Number of establishments	60 243	5 935	4 924	9 522	17 692	9 975	6 001	3 998	1 267	563	364
All employees**	512 004	7 175	7 518	19 527	65 302	69 491	72 181	89 359	54 007	43 709	83 733
Payroll, all employees	9 860 690	19 732	48 856	176 527	755 323	1 031 526	1 265 254	1 848 716	1 272 676	1 131 896	2 310 182
Construction worker hours (thousands)	655 847	6 338	7 715	21 425	73 875	83 533	90 282	114 584	72 373	62 631	123 086
All business receipts	33 521 439	69 676	182 983	709 230	2 858 337	3 501 064	4 169 387	6 139 662	4 360 571	3 853 739	7 676 790
Total construction receipts	32 661 277	68 949	181 295	702 166	2 819 951	3 412 407	4 067 984	5 986 229	4 264 445	3 785 576	7 372 273
Net construction receipts†	28 846 061	63 299	173 028	675 978	2 699 918	3 236 502	3 782 041	5 354 530	3 714 123	3 168 778	5 977 863
Value added††	16 961 501	35 129	91 995	359 268	1 468 968	1 838 709	2 161 957	3 109 093	2 143 297	1 832 332	3 920 749
Payments for materials, components, supplies, and fuels	12 744 723	28 896	82 720	323 773	1 269 335	1 486 449	1 721 486	2 398 869	1 666 951	1 404 608	2 361 631
Payments for construction work subcontracted to others	3 815 215	5 650	8 266	26 188	120 032	175 905	285 943	631 699	550 322	616 798	1 394 410
Rental payments for machinery, equipment, and structures	364 921	2 165	2 457	9 307	33 169	42 937	48 787	68 664	47 677	32 619	77 135
Capital expenditures, other than land	438 977	927	2 478	13 416	53 596	56 733	65 418	79 782	57 324	42 153	67 147
End-of-year gross book value of depreciable assets	4 577 811	36 102	67 831	196 909	661 657	675 613	688 301	837 763	473 403	376 783	563 447
1977											
All employees**	458 687	6 490	9 951	27 189	70 817	71 409	69 083	79 247	50 281	174 221	(NA)
Total construction receipts	21 072 098	63 755	230 357	849 099	2 540 420	2 822 341	3 106 675	4 126 691	2 827 705	14 505 057	(NA)
Value added††	10 681 068	33 503	123 954	445 697	1 318 550	1 485 055	1 605 077	2 086 293	1 390 724	12 192 218	(NA)
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees**	(W)	2	3	2	2	1	1	1	(W)	(W)	(W)
Net construction receipts†	(W)	3	3	2	2	2	1	1	(W)	(W)	(W)
Capital expenditures, other than land	1	15	12	7	4	4	3	1	(W)	(W)	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†Data for this size class include establishments with receipts of \$10,000,000 or more, which were not tabulated separately in 1977.

Table 7. Construction Receipts for Establishments With Payroll by Type of Construction: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Construction receipts			Relative standard error of estimate (percent) for column—		
	Total	New construction ¹	Maintenance and repair	A	B	C
	A	B	C	A	B	C
1982						
Total construction receipts†	32 661 277	22 814 601	9 846 675	(W)	(W)	1
Building construction	26 744 968	18 509 382	8 235 587	(W)	(W)	(W)
Single-family houses	6 009 631	3 317 033	2 692 598	1	1	1
Single-family houses, detached	5 035 890	2 649 587	2 386 303	1	1	1
Single-family houses, attached	973 741	667 446	306 294	1	1	2
Apartment buildings with two or more apartments	1 916 135	1 327 550	588 585	1	1	2
Other residential buildings	858 138	628 443	229 695	1	1	2
Office and bank buildings	5 034 746	3 864 521	1 170 225	(W)	(W)	1
Office buildings	4 243 002	3 316 687	926 315	(W)	(W)	1
Bank buildings and other financial institutions	791 743	547 834	243 909	1	1	1
Industrial buildings and warehouses	5 761 792	4 258 793	1 502 999	(W)	(W)	1
Industrial buildings	5 116 183	3 739 061	1 377 121	(W)	(W)	1
Warehouses	645 608	519 731	125 877	1	1	2
Stores, restaurants, public garages, and automobile service stations	2 389 974	1 552 695	837 278	1	1	1
Religious buildings	401 969	239 811	162 158	1	1	2
Educational buildings	1 538 640	1 124 347	414 292	1	1	2
Hospitals and institutional buildings	2 364 260	1 869 709	494 550	(W)	(W)	1
Amusement, social, and recreational buildings	169 010	123 943	45 067	3	3	4
Other nonresidential buildings	300 673	202 537	98 140	3	3	6
Nonbuilding construction	3 038 056	2 179 023	859 032	1	(W)	1
Sewers, water mains, and related facilities	465 005	325 487	139 517	2	2	4
Sewers, sewer lines, and related facilities	281 972	196 252	85 720	3	3	4
Water mains and related facilities	183 032	129 235	53 796	4	3	6
Sewage treatment and water treatment plants	568 591	511 517	57 073	1	1	4
Sewage treatment plants	361 517	324 247	37 270	1	1	5
Water treatment plants	207 073	187 270	19 803	1	1	3
Blast furnaces, petroleum refineries, and chemical complexes	568 551	339 020	229 531	(W)	(W)	(W)
Power plants	1 130 970	811 663	319 306	(W)	(W)	1
Power plants, nuclear	494 208	365 062	129 145	(W)	(W)	(W)
Power plants, except nuclear	636 762	446 600	190 161	1	1	1
Other nonbuilding construction	304 939	191 336	113 605	6	7	9
Construction work, n.s.k.	2 878 252	2 126 194	752 055	2	1	1
1977						
Total construction receipts†	21 072 098	15 886 398	5 185 700	(W)	(W)	1
Building construction	17 405 490	12 887 818	4 517 672	(W)	(W)	1
Single-family houses	5 300 435	3 563 507	1 736 928	1	1	1
Apartment buildings with two or more apartments	1 436 195	1 048 631	387 564	1	1	2
Other residential buildings	507 915	357 864	150 051	1	1	2
Office and bank buildings	1 684 996	1 301 036	383 960	1	1	1
Industrial buildings and warehouses	3 491 744	2 699 952	791 792	(W)	(W)	1
Stores, restaurants, public garages, and automobile service stations	1 315 319	910 949	404 370	1	1	2
Religious buildings	301 401	192 502	108 899	1	1	2
Educational buildings	1 355 409	1 139 832	215 577	1	1	2
Hospitals and institutional buildings	1 643 221	1 411 888	231 333	(W)	(W)	1
Amusement, social, and recreational buildings	157 863	120 362	37 501	2	2	2
Other nonresidential buildings	210 992	141 295	69 697	3	3	4
Nonbuilding construction	1 860 275	1 485 068	375 207	1	1	2
Sewers, water mains, and related facilities	413 588	315 715	97 873	3	3	5
Sewage treatment and water treatment plants	416 859	393 252	23 607	1	1	3
Power plants	377 069	296 842	80 227	1	1	6
Other nonbuilding construction	652 759	479 259	173 500	2	2	3
Construction work, n.s.k.	1 806 697	1 511 688	295 009	1	1	2

¹For this industry, data for additions and alterations were not collected separately. These data are included with "New Construction."

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H				
All establishments	60 243	512 004	9 860 690	32 661 277	15 205 969	28 846 061	16 961 501	3 815 215	(W)	(W)	(W)
Establishments not specializing by type	16 037	203 993	4 201 308	13 918 215	(NA)	12 164 457	7 093 133	1 753 757	(W)	(W)	1
Establishments specializing 51 percent or more	44 205	308 010	5 659 381	18 743 062	15 205 969	16 681 604	9 868 367	2 061 457	1	(W)	(W)
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type	20 897	94 791	1 264 841	4 488 055	3 600 465	4 356 077	2 361 082	131 977	1	1	2
Establishments with—											
100 percent specialization	6 443	21 865	248 502	936 890	936 890	899 958	483 137	36 932	3	3	6
90 to 99 percent specialization	3 520	14 720	198 363	720 829	667 229	699 607	367 766	21 222	3	3	5
80 to 89 percent specialization	3 556	17 117	230 771	793 349	651 407	774 613	413 891	18 736	3	3	8
70 to 79 percent specialization	3 693	19 568	267 117	946 795	691 277	921 404	501 553	25 391	3	3	7
60 to 69 percent specialization	2 822	15 517	229 657	784 992	485 537	763 111	428 802	21 881	3	3	5
51 to 59 percent specialization	861	6 002	90 428	305 197	168 123	297 383	165 930	7 813	4	3	10
SINGLE-FAMILY HOUSES, ATTACHED											
All establishments specializing in type	1 534	8 329	112 113	392 330	299 579	374 783	199 502	17 547	4	4	10
Establishments with—											
100 percent specialization	488	1 522	16 073	62 490	62 490	59 072	29 666	3 418	9	9	13
90 to 99 percent specialization	182	839	11 527	44 224	40 442	41 491	22 697	2 732	12	12	33
80 to 89 percent specialization	226	1 382	20 105	64 503	52 812	62 179	33 217	2 323	10	8	14
70 to 79 percent specialization	282	1 822	27 424	90 686	65 956	87 809	48 360	2 876	8	8	33
60 to 69 percent specialization	225	1 746	23 049	83 260	52 158	78 622	41 815	4 637	13	10	20
51 to 59 percent specialization	130	1 017	13 934	47 167	25 720	45 608	23 746	1 559	14	9	9
APARTMENT BUILDINGS WITH TWO OR MORE APARTMENTS											
All establishments specializing in type	1 571	16 106	273 463	920 855	706 304	844 048	471 032	76 807	3	2	4
Establishments with—											
100 percent specialization	346	2 799	48 204	170 075	170 075	153 441	89 046	16 634	5	6	13
90 to 99 percent specialization	147	1 739	27 332	100 375	93 536	94 094	55 558	6 280	6	5	7
80 to 89 percent specialization	201	2 192	37 298	109 429	90 090	102 314	50 024	7 115	8	6	6
70 to 79 percent specialization	390	3 849	67 616	227 516	164 902	208 538	114 835	18 978	5	4	4
60 to 69 percent specialization	378	3 796	59 667	204 416	126 843	189 136	105 998	15 280	5	4	4
51 to 59 percent specialization	107	1 729	33 346	109 043	60 855	96 524	55 571	12 519	6	8	11
OTHER RESIDENTIAL BUILDINGS											
All establishments specializing in type	273	3 228	66 309	239 977	174 857	199 729	118 032	40 247	4	4	4
Establishments with—											
100 percent specialization	42	512	8 812	35 674	35 674	32 085	21 520	3 589	6	8	20
90 to 99 percent specialization	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—
80 to 89 percent specialization	75	655	12 032	39 929	32 202	34 956	19 897	4 972	15	16	13
70 to 79 percent specialization	26	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—
60 to 69 percent specialization	101	1 105	23 106	95 390	60 336	71 080	39 729	24 310	8	6	4
51 to 59 percent specialization	26	525	13 388	36 085	20 486	31 692	18 236	4 393	10	7	6
BANK BUILDINGS AND OTHER FINANCIAL INSTITUTIONS											
All establishments specializing in type	57	894	26 034	150 609	96 245	(D)	47 523	(D)	6	3	—
Establishments with—											
100 percent specialization	*11	*33	*856	*1 937	*1 937	*1 700	*1 490	*237	52	46	73
90 to 99 percent specialization	*12	79	1 977	(D)	(D)	(D)	(D)	(D)	31	—	—
80 to 89 percent specialization	4	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	—	—
70 to 79 percent specialization	*13	78	1 829	7 435	5 606	5 688	3 399	1 747	22	12	2
60 to 69 percent specialization	*14	630	20 354	(D)	(D)	(D)	(D)	(D)	3	—	—
51 to 59 percent specialization	*3	*34	*394	*2 001	*1 093	*1 974	*710	27	42	45	37
WAREHOUSES											
All establishments specializing in type	240	1 686	32 926	115 092	84 041	104 199	65 984	10 892	6	5	6
Establishments with—											
100 percent specialization	28	97	1 757	*6 878	*6 878	*6 243	2 267	*635	31	41	70
90 to 99 percent specialization	65	272	(D)	(D)	(D)	(D)	(D)	(D)	11	—	—
80 to 89 percent specialization	8	142	(D)	(D)	(D)	(D)	(D)	(D)	14	—	—
70 to 79 percent specialization	56	465	8 163	27 835	20 572	26 293	14 823	1 542	14	11	17
60 to 69 percent specialization	49	371	7 290	28 539	17 563	23 035	13 010	5 503	17	11	5
51 to 59 percent specialization	33	338	5 511	19 222	10 734	17 947	10 632	1 275	21	16	21
INDUSTRIAL BUILDINGS											
All establishments specializing in type	2 240	45 796	1 127 430	3 330 600	2 636 944	2 832 993	1 827 266	497 607	1	1	1
Establishments with—											
100 percent specialization	809	13 532	329 184	888 297	888 297	798 618	492 376	89 679	1	1	2
90 to 99 percent specialization	202	4 679	121 388	372 108	345 605	302 856	193 702	69 252	2	2	1
80 to 89 percent specialization	316	5 275	124 123	386 722	319 599	331 813	212 187	54 908	3	2	2
70 to 79 percent specialization	387	8 873	218 105	651 953	474 418	554 723	390 653	97 229	2	1	2
60 to 69 percent specialization	401	7 525	186 438	583 453	360 706	492 905	322 201	90 548	2	2	2
51 to 59 percent specialization	124	5 910	148 191	448 066	248 316	352 076	216 144	95 989	1	1	1
OFFICE BUILDINGS											
All establishments specializing in type	1 097	21 971	563 930	2 100 579	1 508 650	1 678 951	1 010 987	421 628	1	1	1
Establishments with—											
100 percent specialization	241	2 919	64 192	237 198	237 198	201 674	123 072	35 524	5	3	5
90 to 99 percent specialization	106	1 549	36 972	152 908	144 496	115 442	63 570	37 466	6	5	5
80 to 89 percent specialization	86	2 220	60 793	240 348	197 134	178 667	100 286	61 680	5	2	2
70 to 79 percent specialization	245	4 673	125 273	443 003	321 862	353 872	195 454	89 130	2	2	2
60 to 69 percent specialization	313	6 970	174 736	678 689	417 029	538 731	316 433	139 958	1	1	2
51 to 59 percent specialization	103	3 639	101 963	348 431	190 928	290 563	212 170	57 868	2	2	1

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982—Con.

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
A	B	C	D	E	F	G	H	I	J	K	L
STORES, RESTAURANTS, PUBLIC GARAGES, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type	1 799	14 327	268 447	943 500	762 865	848 687	487 341	94 813	3	2	5
Establishments with—											
100 percent specialization	524	3 918	77 445	278 253	278 253	252 412	145 754	25 841	5	4	4
90 to 99 percent specialization	238	2 046	36 564	123 520	114 338	109 049	61 211	14 470	7	7	21
80 to 89 percent specialization	215	1 708	32 564	115 457	94 925	102 455	59 596	13 002	8	5	8
70 to 79 percent specialization	372	2 618	43 126	156 044	113 850	140 423	77 777	15 621	7	5	6
60 to 69 percent specialization	296	2 605	51 435	171 475	107 187	155 661	87 947	15 814	7	5	13
51 to 59 percent specialization	152	1 431	27 311	98 750	54 310	88 685	55 054	10 064	7	6	5
EDUCATIONAL BUILDINGS											
All establishments specializing in type	497	4 753	92 820	370 509	259 943	286 396	153 352	84 113	5	4	4
Establishments with—											
100 percent specialization	96	766	9 041	32 245	32 245	26 067	17 590	6 178	18	14	13
90 to 99 percent specialization	45	270	5 533	24 195	22 475	19 158	11 410	5 037	23	23	19
80 to 89 percent specialization	72	660	12 006	51 173	41 699	41 167	19 745	10 006	12	12	20
70 to 79 percent specialization	104	832	20 401	78 621	57 098	58 854	33 177	19 767	8	7	10
60 to 69 percent specialization	95	1 128	21 403	81 060	49 848	66 067	29 359	14 993	9	6	6
51 to 59 percent specialization	83	1 096	24 435	103 215	56 575	75 083	42 070	28 132	9	6	6
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type	482	10 399	237 462	830 839	572 709	628 893	364 756	201 946	1	1	1
Establishments with—											
100 percent specialization	61	717	14 648	58 211	58 211	46 073	27 614	12 138	8	8	5
90 to 99 percent specialization	32	348	8 422	34 057	31 674	23 970	12 321	10 087	9	7	6
80 to 89 percent specialization	57	796	18 462	61 535	50 417	44 987	27 300	16 548	6	7	3
70 to 79 percent specialization	129	3 696	76 165	245 885	179 607	196 197	117 689	49 687	3	2	1
60 to 69 percent specialization	143	3 090	73 893	263 075	161 574	196 154	112 177	66 920	3	2	1
51 to 59 percent specialization	59	1 751	45 872	168 076	91 224	121 511	67 654	46 565	3	2	2
SEWERS, SEWER LINES, AND RELATED FACILITIES											
All establishments specializing in type	619	2 627	32 893	119 248	108 301	110 861	67 306	8 387	7	6	8
Establishments with—											
100 percent specialization	437	1 615	17 595	69 709	69 709	66 637	38 329	3 071	9	9	21
90 to 99 percent specialization	39	257	4 233	12 997	12 393	11 991	7 409	1 006	17	13	10
80 to 89 percent specialization	31	197	2 768	9 186	7 560	8 691	8 328	495	28	19	18
70 to 79 percent specialization	62	216	4 947	17 519	12 719	14 870	8 023	2 649	12	6	5
60 to 69 percent specialization	32	204	2 554	7 031	4 304	(D)	3 854	(D)	27	20	—
51 to 59 percent specialization	*17	137	795	2 806	1 614	(D)	*1 361	(D)	16	25	—
BLAST FURNACES, PETROLEUM REFINERIES, AND CHEMICAL COMPLEXES											
All establishments specializing in type	104	5 544	158 545	386 314	324 462	322 362	232 213	63 952	1	1	(W)
Establishments with—											
100 percent specialization	43	2 114	51 621	130 526	130 526	110 417	84 670	20 109	1	1	(W)
90 to 99 percent specialization	15	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—
80 to 89 percent specialization	6	1 128	38 343	82 746	66 969	68 207	47 754	14 539	1	1	1
70 to 79 percent specialization	21	765	23 599	64 646	49 123	51 613	27 435	13 033	4	3	1
60 to 69 percent specialization	15	791	24 256	56 654	35 684	49 898	39 793	6 756	2	(W)	(W)
51 to 59 percent specialization	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—
POWER PLANTS, EXCEPT NUCLEAR											
All establishments specializing in type	79	6 017	170 563	327 535	293 388	297 706	239 983	29 829	1	1	1
Establishments with—											
100 percent specialization	33	3 282	90 773	164 182	164 182	153 483	135 117	10 699	2	2	2
90 to 99 percent specialization	*15	279	6 922	16 069	15 093	14 909	11 343	1 160	16	6	5
80 to 89 percent specialization	14	1 494	44 216	86 008	74 071	74 422	48 562	11 586	1	2	2
70 to 79 percent specialization	7	470	14 630	26 701	19 522	25 003	23 023	1 698	(W)	(W)	(W)
60 to 69 percent specialization	*2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—
51 to 59 percent specialization	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—
WATER MAINS AND RELATED FACILITIES											
All establishments specializing in type	258	1 690	21 996	76 651	70 249	71 245	44 834	5 406	10	9	12
Establishments with—											
100 percent specialization	218	1 370	15 822	58 606	58 606	54 501	33 952	4 105	13	11	15
90 to 99 percent specialization	*10	*35	(S)	*1 385	*1 275	*1 320	*455	(S)	70	72	—
80 to 89 percent specialization	5	(S)	(S)	(S)	(S)	(S)	(S)	(S)	—	—	—
70 to 79 percent specialization	*7	42	740	2 816	2 038	2 444	1 228	*372	21	32	54
60 to 69 percent specialization	16	179	3 639	9 720	5 965	9 113	6 164	607	31	23	33
51 to 59 percent specialization	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	—	—

Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
	A	B	C	D	E	F	G
United States	60 243	397 548	655 847	381 815	158 097	390 306	163 328
Alabama	819	4 762	7 984	4 538	1 921	4 638	2 007
Alaska	138	1 457	1 589	1 027	275	1 325	346
Arizona	876	5 915	9 968	5 488	2 348	5 829	2 532
Arkansas	602	2 756	4 587	2 736	1 122	2 602	1 099
California	5 273	38 130	53 586	36 730	13 135	36 841	13 323
Colorado	1 143	7 576	12 583	7 071	2 891	7 224	3 095
Connecticut	965	5 565	9 614	5 254	2 443	5 284	2 285
Delaware	203	2 818	4 920	2 680	1 240	3 218	1 344
District of Columbia	69	792	1 156	755	286	810	290
Florida	3 420	26 919	48 119	26 925	11 956	26 599	12 109
Georgia	1 427	9 702	16 078	9 418	3 921	9 508	4 056
Hawaii	183	1 548	2 485	1 601	644	1 617	632
Idaho	278	1 269	1 988	1 125	420	1 183	469
Illinois	2 794	17 733	27 910	16 516	6 549	17 378	6 870
Indiana	1 334	8 943	14 289	8 458	3 400	8 911	3 579
Iowa	916	3 633	5 728	3 374	1 350	3 493	1 396
Kansas	809	4 345	6 518	3 917	1 499	4 204	1 593
Kentucky	895	5 308	9 391	4 961	2 220	5 252	2 329
Louisiana	1 071	7 227	11 924	7 047	2 927	7 394	3 113
Maine	314	1 340	2 421	1 149	535	1 289	602
Maryland	1 307	10 672	18 146	10 064	4 304	10 334	4 457
Massachusetts	1 636	8 829	15 077	8 505	3 647	8 854	3 827
Michigan	1 782	10 019	15 928	9 858	4 061	9 882	3 894
Minnesota	1 119	7 590	12 364	6 935	2 806	7 462	3 042
Mississippi	511	2 883	5 148	2 798	1 229	2 857	1 274
Missouri	1 245	8 003	12 786	7 613	3 001	7 878	3 192
Montana	236	774	1 218	677	255	732	289
Nebraska	550	2 431	4 164	2 285	971	2 309	1 019
Nevada	295	1 831	2 784	1 836	719	1 898	731
New Hampshire	271	1 175	2 113	1 067	466	1 139	508
New Jersey	2 344	14 155	23 601	13 591	5 678	13 962	5 770
New Mexico	455	2 410	3 731	2 315	903	2 319	886
New York	3 938	24 966	41 517	23 775	9 811	24 235	10 285
North Carolina	1 905	13 149	23 161	13 264	5 721	13 057	5 852
North Dakota	194	1 297	2 211	1 138	493	1 250	529
Ohio	2 505	15 882	25 985	14 824	6 073	14 888	6 219
Oklahoma	1 015	5 463	8 950	5 274	2 154	5 492	2 309
Oregon	636	2 777	4 088	2 817	995	2 852	1 051
Pennsylvania	2 908	21 410	34 873	20 537	8 407	21 057	8 581
Rhode Island	261	1 242	1 942	1 207	479	1 207	487
South Carolina	845	6 611	11 907	6 786	3 067	6 585	3 026
South Dakota	176	781	1 218	686	293	793	313
Tennessee	978	6 739	11 576	6 726	2 876	6 708	2 914
Texas	4 519	37 170	65 174	35 231	15 240	36 732	16 349
Utah	452	2 642	4 412	2 434	1 051	2 593	1 119
Vermont	171	659	1 095	628	268	620	265
Virginia	1 532	11 074	19 861	10 850	4 733	10 892	5 067
Washington	922	5 206	7 900	5 417	2 124	5 189	1 950
West Virginia	322	1 788	3 039	1 703	728	1 645	712
Wisconsin	1 470	9 213	15 442	9 377	4 082	9 312	3 895
Wyoming	199	953	1 574	807	356	957	420

¹Sum of construction workers during pay periods including 12th of March, May, August, and November.

Payroll by State: 1982

July to September		October to December		Relative standard error of estimate (percent) for column—										Location of establishment
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
407 130	170 170	388 931	164 250	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	U.S.
4 762	2 009	4 810	2 045	4	4	4	4	4	4	4	5	5	5	Ala.
1 979	517	1 449	449	4	6	4	8	4	8	4	8	5	9	Alaska
5 987	2 581	5 774	2 507	3	3	3	3	3	3	3	3	3	3	Ariz.
2 794	1 198	2 641	1 166	5	6	5	7	5	7	6	7	6	8	Ark.
40 822	14 009	36 107	13 118	1	1	1	1	1	1	1	1	1	1	Calif.
7 766	3 356	7 659	3 239	3	2	2	3	3	3	3	3	3	3	Colo.
5 489	2 346	5 845	2 539	3	3	3	3	3	3	4	3	3	6	Conn.
2 711	1 200	2 581	1 135	2	2	2	2	3	2	3	2	3	3	Del.
818	300	770	280	5	7	6	9	5	8	5	8	5	8	D.C.
26 869	12 195	25 888	11 857	1	1	1	1	1	1	1	1	1	1	Fla.
9 738	4 081	9 679	4 018	3	2	3	3	3	3	3	3	3	3	Ga.
1 482	591	1 453	617	5	4	6	6	5	5	6	6	5	5	Hawaii
1 255	528	1 385	570	8	9	8	11	8	11	8	10	9	11	Idaho
17 820	7 120	18 462	7 368	1	1	1	1	1	1	1	1	2	3	Ill.
9 177	3 720	8 780	3 589	2	2	2	2	2	2	2	2	2	3	Ind.
3 694	1 476	3 619	1 504	4	4	4	5	4	6	4	5	4	5	Iowa
4 465	1 735	4 474	1 690	6	4	6	5	6	5	6	5	7	5	Kans.
5 542	2 517	5 094	2 323	3	3	3	3	3	4	3	4	3	4	Ky.
7 370	3 073	6 630	2 810	3	3	3	3	3	3	3	3	3	3	La.
1 405	635	1 403	648	8	9	8	10	8	10	8	10	12	13	Maine
10 936	4 675	10 924	4 709	2	2	2	2	2	2	2	2	2	2	Md.
8 811	3 850	8 589	3 752	2	2	2	3	2	3	2	3	2	3	Mass.
10 082	4 018	9 658	3 953	2	2	3	3	2	2	2	2	2	3	Mich.
7 848	3 271	7 757	3 244	2	2	2	3	2	3	2	2	2	3	Minn.
2 935	1 313	2 817	1 330	5	5	6	7	5	6	5	6	6	7	Miss.
7 946	3 314	8 163	3 277	2	2	2	3	2	3	2	3	2	3	Mo.
796	340	808	332	9	9	9	13	10	13	9	12	9	12	Mont.
2 511	1 092	2 382	1 080	5	5	5	6	5	6	5	6	5	6	Nebr.
1 784	681	1 675	651	5	5	4	6	5	6	5	6	5	7	Nev.
1 281	611	1 120	527	7	8	8	10	7	9	7	9	8	10	N.H.
14 491	6 179	13 919	5 973	2	2	2	2	2	2	2	2	2	2	N.J.
2 460	971	2 390	969	6	6	6	8	6	7	6	8	8	9	N. Mex.
25 496	10 813	25 169	10 606	1	1	1	2	1	2	1	1	1	2	N.Y.
13 013	5 884	12 587	5 703	2	2	2	2	2	2	2	2	2	2	N.C.
1 370	612	1 335	575	6	5	5	7	5	6	6	6	6	7	N. Dak.
16 406	6 825	16 343	6 866	1	1	1	2	1	2	3	3	1	2	Ohio
5 600	2 342	5 074	2 144	4	4	4	5	4	5	4	5	4	5	Okla.
2 725	1 084	2 477	956	4	3	3	5	4	5	4	5	5	7	Oreg.
21 730	9 022	21 293	8 861	1	1	1	1	1	1	1	1	1	1	Pa.
1 236	500	1 201	476	7	8	8	10	7	10	7	10	8	10	R.I.
6 518	2 954	6 265	2 858	3	3	3	3	3	3	4	3	3	3	S.C.
819	319	747	291	10	10	11	13	10	12	10	13	10	14	S. Dak.
6 740	2 934	6 444	2 851	3	3	4	4	3	4	3	3	3	3	Tenn.
39 439	17 512	35 742	16 071	1	1	1	1	1	1	2	2	1	1	Tex.
2 965	1 246	2 398	994	5	5	4	5	5	6	11	12	5	6	Utah
649	273	629	287	10	11	11	13	10	14	11	14	10	14	Vt.
11 557	5 304	10 491	4 755	2	2	2	2	2	2	2	3	2	3	Va.
4 975	1 926	4 820	1 899	3	2	3	3	3	3	3	3	3	3	Wash.
1 944	856	1 727	742	7	7	6	7	6	7	10	11	7	8	W. Va.
9 135	3 819	8 516	3 644	2	2	1	2	1	2	2	2	2	3	Wis.
971	422	949	374	10	9	9	11	9	10	13	11	13	12	Wyo.

Table 10. Construction Receipts for Establishments With Payroll by Location of Construction Work: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1982						1977 construction receipts for work done in this State	Percent change 1982/ 1977 (col A÷F)	Relative standard error of estimate (percent) for column—		
	Construction receipts for work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State							
		Number	Construction receipts	Number	Construction receipts						
A	B	C	D	E	F	G	A	C	E		
United States -----	32 661 277	59 088	29 562 064	7 794	3 099 213	21 072 098	55.0	(W)	(W)	(W)	
Alabama -----	317 282	811	287 102	164	30 179	284 972	11.3	3	3	3	
Alaska -----	190 804	138	150 235	51	40 569	99 856	91.1	5	6	3	
Arizona -----	464 718	864	437 124	68	27 594	237 477	95.7	3	3	6	
Arkansas -----	179 899	595	168 463	71	11 435	191 267	-5.9	5	6	3	
California -----	3 482 603	5 263	3 437 724	106	44 879	2 227 927	56.3	1	1	2	
Colorado -----	702 256	1 138	627 562	85	74 693	312 672	124.6	2	2	4	
Connecticut -----	488 624	949	449 570	178	39 053	251 756	94.1	2	2	4	
Delaware -----	91 123	197	80 878	58	10 244	65 249	39.7	5	6	3	
District of Columbia -----	196 930	63	36 234	266	160 696	118 513	66.2	2	8	2	
Florida -----	1 883 725	3 389	1 762 012	172	121 713	823 718	128.7	1	1	2	
Georgia -----	751 683	1 410	634 271	273	117 412	448 953	67.4	2	3	3	
Hawaii -----	188 811	182	134 845	38	53 965	92 474	104.2	3	4	4	
Idaho -----	115 744	275	99 680	107	16 064	109 875	5.3	9	10	9	
Illinois -----	1 536 466	2 756	1 456 062	223	80 403	1 238 350	24.1	1	1	1	
Indiana -----	799 293	1 310	658 615	270	140 678	546 057	46.4	2	2	1	
Iowa -----	297 948	905	253 813	115	44 135	337 072	-11.6	3	4	3	
Kansas -----	336 623	794	265 310	153	71 312	264 186	27.4	3	4	1	
Kentucky -----	403 548	877	337 612	250	65 936	295 456	36.6	2	3	3	
Louisiana -----	633 512	1 060	551 775	84	81 737	411 592	53.9	2	3	2	
Maine -----	111 124	313	94 078	75	17 046	77 333	43.7	6	8	8	
Maryland -----	725 147	1 285	662 109	202	63 037	477 849	51.8	2	2	2	
Massachusetts -----	806 715	1 587	724 811	212	81 904	435 203	85.4	2	2	8	
Michigan -----	915 924	1 743	820 867	145	95 056	872 290	5.0	2	2	2	
Minnesota -----	667 402	1 116	605 356	127	62 046	407 080	63.9	2	2	1	
Mississippi -----	175 947	500	126 937	272	49 009	135 924	29.4	5	7	4	
Missouri -----	611 922	1 213	575 541	162	36 381	478 758	27.8	2	2	8	
Montana -----	84 445	236	72 516	80	11 928	87 974	-4.0	8	10	4	
Nebraska -----	199 754	549	165 150	197	34 604	176 203	13.4	4	5	9	
Nevada -----	202 137	294	174 560	90	27 576	128 313	57.5	3	4	3	
New Hampshire -----	113 423	268	84 660	189	28 762	67 979	66.9	6	7	8	
New Jersey -----	1 156 534	2 283	1 085 960	222	70 573	677 060	70.8	2	2	1	
New Mexico -----	205 088	450	163 071	102	42 016	112 535	82.2	5	6	7	
New York -----	2 306 611	3 811	2 136 403	413	170 207	1 191 843	93.5	1	1	3	
North Carolina -----	748 246	1 873	697 534	127	50 711	500 402	49.5	2	2	3	
North Dakota -----	126 705	181	104 795	57	21 909	73 062	73.4	4	5	2	
Ohio -----	1 389 998	2 462	1 240 892	223	149 106	1 132 055	22.8	1	1	2	
Oklahoma -----	479 439	953	421 471	137	57 968	281 807	70.1	3	3	3	
Oregon -----	225 001	626	204 358	114	20 643	251 998	-10.7	3	3	5	
Pennsylvania -----	1 676 161	2 802	1 609 914	270	66 246	1 016 983	64.8	1	1	3	
Rhode Island -----	86 878	246	82 208	65	4 670	67 052	29.6	6	7	17	
South Carolina -----	414 927	813	321 918	184	93 008	250 708	65.5	2	3	2	
South Dakota -----	65 576	173	49 530	47	16 045	59 994	9.3	7	9	5	
Tennessee -----	500 866	956	434 829	200	66 037	363 251	37.9	3	3	4	
Texas -----	2 984 754	4 343	2 875 323	146	109 430	1 536 544	94.3	1	1	2	
Utah -----	211 011	445	203 632	26	7 379	139 847	50.9	5	5	9	
Vermont -----	52 521	171	43 363	45	9 157	32 099	63.6	9	10	7	
Virginia -----	817 782	1 505	651 961	318	165 821	536 247	52.5	2	2	2	
Washington -----	598 939	920	535 161	144	63 777	439 756	36.2	2	2	4	
West Virginia -----	151 556	321	90 728	175	60 828	102 527	47.8	4	6	3	
Wisconsin -----	654 867	1 461	615 854	123	39 013	538 126	21.7	2	2	4	
Wyoming -----	132 261	198	57 663	161	74 597	65 852	100.8	4	8	3	

Table 11. All Business Receipts for Establishments With Payroll by Kind of Business Activity: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	All business receipts		Relative standard error of estimate (percent)	
	1982	1977	1982	1977
All kinds of business.....	33 521 439	21 431 185	(W)	(W)
General building contractor	242 654	332 094	1	3
Heavy construction contractor	415 113	256 545	2	1
Air conditioning contractor	7 502 028	4 410 529	(W)	1
Electrical contractor	486 221	220 894	1	2
Excavating and earthmoving contractor	68 792	(NA)	4	(NA)
Heating contractor	6 063 672	3 934 069	1	1
Insulation contractor	86 876	(NA)	3	(NA)
Plumbing contractor	10 740 934	8 074 686	1	1
Refrigeration contractor	906 164	501 627	2	2
Sheet metal contractor	1 306 705	650 414	1	1
Mechanical contractor	1 776 575	399 189	(W)	1
Retail trade	168 357	191 981	3	2
Other activities	3 757 348	2 459 157	3	2

Table 12. Profile of Establishments With Payroll in This Industry: 1982 and Earlier Census Years

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics				Relative standard error of estimate (percent) for 1982
	1982	1977	1972	
AVERAGE PER ESTABLISHMENT				
Number of employees**-----	8.5	8.1	8.6	(W)
Number of construction workers-----	6.6	6.5	7.0	(W)
Number of all other employees-----	1.9	1.5	1.6	1
Payroll, all employees----- \$1,000--	163.7	113.7	89.8	(W)
Construction worker wages----- do--	124.1	89.0	71.5	(W)
Other employee salaries----- do--	39.6	24.6	18.4	(W)
All business receipts----- do--	556.4	379.8	293.0	(W)
Total construction receipts----- do--	542.2	373.4	287.5	(W)
Payments for materials, components, supplies, and fuels----- do--	211.6	156.2	114.3	(W)
Construction work subcontracted to others----- do--	63.3	34.3	32.4	(W)
Capital expenditures, other than land----- do--	7.3	6.8	4.2	1
Gross book value of depreciable assets----- do--	76.0	39.4	28.1	1
AVERAGE PER EMPLOYEE				
Payroll, all employees----- do--	19.3	14.0	10.5	(W)
All business receipts----- do--	65.5	46.7	34.2	(W)
Value added††----- do--	33.1	23.3	17.1	(W)
AVERAGE PER CONSTRUCTION WORKER				
Construction worker wages----- do--	18.8	13.6	10.3	(W)
Total construction receipts----- do--	82.2	57.1	41.3	(W)
Construction worker hours----- thousand--	1.7	(NA)	(NA)	(W)
AVERAGE PER OTHER EMPLOYEE				
Other employee salaries----- \$1,000--	20.9	16.0	11.8	(W)
AVERAGE PER DOLLAR OF TOTAL CONSTRUCTION RECEIPTS				
Payroll, all employees-----	.302	.304	.313	(W)
Payments for materials, components, supplies, and fuels-----	.390	.418	.398	(W)
Payments for construction work subcontracted to others-----	.117	.092	.113	(W)
Capital expenditures, other than land-----	.013	.018	.015	1
Rental payments for machinery, equipment, and structures-----	.011	.009	(NA)	1

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker (thousands)	Total construction receipts per construction worker (\$1,000)	Average per dollar of total construction receipts				
					Payroll, all employees	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures
United States -----	8.5	19.3	1.6	82.2	.302	.390	.117	.013	.011
Alabama -----	7.4	14.7	1.7	68.5	.272	.453	.098	.015	.009
Alaska -----	13.6	22.7	1.1	103.1	.283	.418	.151	.015	.008
Arizona -----	8.8	17.9	1.7	76.4	.307	.434	.074	.017	.013
Arkansas -----	5.8	13.9	1.7	67.4	.261	.427	.113	.014	.010
California -----	9.6	22.6	1.4	94.2	.319	.359	.095	.013	.015
Colorado -----	8.4	19.9	1.7	85.6	.295	.401	.150	.012	.012
Connecticut -----	7.4	21.3	1.7	84.5	.324	.366	.123	.011	.010
Delaware -----	16.5	22.8	1.7	54.4	.498	.219	.082	.008	.013
District of Columbia -----	15.1	18.6	1.5	79.3	.309	(D)	.072	.012	.011
Florida -----	9.8	16.5	1.8	69.4	.296	.449	.093	.014	.011
Georgia -----	8.5	15.4	1.7	75.0	.259	.454	.118	.013	.010
Hawaii -----	11.5	20.7	1.6	87.6	.322	.333	.070	.010	.016
Idaho -----	6.0	16.9	1.6	87.4	.256	.433	.089	.014	.009
Illinois -----	8.3	23.2	1.6	86.9	.348	.351	.102	.012	.011
Indiana -----	8.7	20.2	1.6	81.3	.324	.368	.135	.012	.012
Iowa -----	5.3	17.2	1.6	75.8	.304	.405	.105	.013	.011
Kansas -----	7.1	16.9	1.5	74.7	.300	.420	.104	.012	.012
Kentucky -----	7.5	17.1	1.8	75.3	.288	.395	.115	.017	.011
Louisiana -----	8.4	18.1	1.6	77.6	.289	.409	.118	.016	.010
Maine -----	5.5	14.7	1.8	73.3	.257	.408	.118	.010	.010
Maryland -----	10.6	17.9	1.7	84.9	.273	.378	.161	.014	.010
Massachusetts -----	7.1	19.3	1.7	87.3	.290	.371	.119	.012	.009
Michigan -----	7.4	21.2	1.6	92.7	.301	.357	.166	.013	.011
Minnesota -----	8.9	24.0	1.6	92.5	.342	.379	.150	.017	.012
Mississippi -----	6.8	13.9	1.8	61.5	.271	.423	.104	.017	.010
Missouri -----	8.4	20.5	1.6	87.4	.305	.349	.124	.009	.009
Montana -----	4.4	19.0	1.6	97.2	.264	.421	.170	.010	.012
Nebraska -----	5.9	17.2	1.7	78.7	.294	.452	.093	.012	.011
Nevada -----	8.0	22.3	1.5	99.9	.288	.381	.137	.017	.014
New Hampshire -----	5.8	17.1	1.8	87.3	.264	.446	.135	.011	.010
New Jersey -----	7.7	21.1	1.7	85.8	.315	.343	.123	.012	.008
New Mexico -----	6.8	15.0	1.5	69.9	.274	.432	.124	.017	.011
New York -----	8.3	19.7	1.7	90.5	.284	.352	.138	.012	.008
North Carolina -----	8.6	14.7	1.8	61.0	.298	.436	.082	.017	.011
North Dakota -----	8.3	21.7	1.7	88.7	.303	.414	.113	.009	.006
Ohio -----	8.4	21.4	1.6	84.0	.337	.340	.124	.011	.012
Oklahoma -----	6.7	17.8	1.6	80.6	.276	.430	.093	.015	.010
Oregon -----	6.0	21.8	1.5	92.1	.324	.375	.128	.012	.016
Pennsylvania -----	9.5	20.6	1.6	86.4	.307	.367	.123	.013	.012
Rhode Island -----	6.1	17.0	1.6	85.6	.254	.396	.204	.007	.008
South Carolina -----	9.9	14.7	1.8	61.3	.304	.452	.088	.016	.008
South Dakota -----	5.7	14.6	1.6	70.8	.266	.471	.123	.017	.011
Tennessee -----	8.6	16.0	1.7	72.1	.275	.450	.104	.015	.009
Texas -----	10.4	18.0	1.8	83.0	.273	.441	.107	.017	.011
Utah -----	7.4	19.9	1.7	96.4	.262	.375	.181	.017	.016
Vermont -----	4.8	13.7	1.7	67.7	.254	(D)	.118	.021	.012
Virginia -----	9.2	15.6	1.8	67.7	.293	.446	.115	.014	.011
Washington -----	7.9	23.5	1.5	112.7	.290	.360	.157	.010	.013
West Virginia -----	6.9	16.2	1.7	57.4	.353	.427	.059	.013	.011
Wisconsin -----	8.0	21.0	1.7	79.6	.338	.399	.113	.012	.009
Wyoming -----	6.0	16.1	1.7	69.8	.290	.417	.137	.011	.016

APPENDIX A.

Explanation of Terms

Construction—Is composed of three broad categories: (1) new construction, (2) additions and alterations, and (3) maintenance and repair. "New construction" includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators and escalators. "Additions and alterations" includes construction activity making structural changes to existing facilities. "Maintenance and repair" includes the restoration of existing buildings or other structures or their service facilities, including the replacement of integral parts. Repainting, repapering, reroofing, etc., are also included.

Construction includes:

- special trade contracting such as electrical work, painting, and carpentering on mobile structures (trailers, mobile homes, and ships).
- support activities by construction contractors on mineral properties, except the following: sinking mine shafts; tunneling and shoring mines; erection, repairing and dismantling of drilling rigs; and building well foundations.
- the physical development of land for purposes other than agriculture.
- demolition of existing structures.

Construction does not include:

- shipbuilding.
- manufacturing of other mobile structures.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Number of establishments in business at end of year—Includes all full-year or part-year establishments that were in business at the end of 1982.

Proprietors and working partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners. The partnership factor was based on information received during a large-scale test conducted in prior years.

All employees—Comprised all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid-sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are excluded.

Total employment is calculated for each establishment and is derived by summing the construction workers data reported for March, May, August, and November, dividing by 4 and adding to it the number of other employees reported for March.

This approach was designed to simplify the questionnaire format and the reporting requirements of respondents. The industry average of these four selected pay periods approximates very closely the average employment for the year that would be obtained by using pay periods in all 12 months for almost all of the construction industries.

Construction workers—Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working supervisor level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working supervisor level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1982 and are published in the detailed statistics tables.

Payroll—Includes the gross earnings paid in the calendar year 1982 to all employees on the payroll of construction establishments. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Payroll data were collected and tabulated for the employment categories described above and separately for the first quarter of 1982.

Payroll data for auxiliary establishments of multiestablishment companies are not included in these totals. Selected data for these types of establishments are found in the industry summary report and the 1982 Enterprise Statistics reports.

Employer costs for fringe benefits—Represents expenditures made by the employer during 1982 for legally required and voluntary fringe benefit programs for employees. These include employers' Social Security contributions, unemployment compensation, workers' compensation, State temporary disability payments, union negotiated benefits, life insurance premiums, pension plans, insurance premiums on hospital and medical plans, and welfare plans.

All business receipts—Includes all receipts from general contracting, special trade contracting or subcontracting, and land development and improvement work. It also includes all receipts from the sale of land (not recorded as fixed assets of the reporting establishments) and buildings built for sale. All other receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.) are also included.

Money obtained during the year in the form of construction loans is not treated as receipts, nor is money realized from the sale or other disposition of the establishment's fixed assets.

Also excluded are receipts from operations in foreign countries and nonoperating income such as interest and dividends.

All business receipts are broken down in the following detail:

Total construction receipts—Includes all receipts during 1982 for construction work performed by general contractors, special trades contractors or subcontractors, and for land development and improvement work. Included are receipts for maintenance and repair construction work, as well as for new construction and additions and alterations. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include in this item their 1982 receipts from the sale of buildings and other structures built for sale, excluding from these receipts the value of the land (see "land receipts" below) but including the value of any improvements an establishment made to the land. Builders who traded a new home or other building for an existing one were to include the estimated value of the trade-in.

Also included in construction receipts were fees received as sponsors of joint ventures and fees received as agents for owners (for construction work).

Excluded were receipts for separately definable architectural and engineering work done by the reporting establishment for others and receipts from the rental of equipment to others (see "other business receipts" below).

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies for construction purposes were instructed to include as construction receipts both the receipts for the installation and the receipts for the value (selling price) of the items installed. (Receipts for the selling price of items sold but not installed were to be included in "other business receipts.")

Receipts for work subcontracted in from others—Covers receipts during 1982 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total construction receipts accounted for by such work, and the percentages reported were applied to the reported construction receipts to develop a value for this item.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in construction receipts.)

Other business receipts—Includes business receipts not reported as construction receipts or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Net construction receipts—Derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to all business receipts, less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, value added is modified to be equal to all business receipts less land receipts; payments for construction work subcontracted to others; and payments for materials, components, supplies, and fuels. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Selected payments—Represents the total of payments for materials, components, and supplies; payments for construction work subcontracted to others; and payments for selected power, fuels, and lubricants. Capital expenditures and rental payments for machinery, equipment, and structures are shown elsewhere.

Payments for materials, components, and supplies include:

- total payments made by the reporting establishments during 1982 for the purchase of all materials, components, and supplies, except fuels, used for construction. (Supplies include expendable tools charged to current accounts.)
- freight and other direct charges incurred by the reporting establishment in acquiring the materials, components, and supplies are also included, as are the value of materials, components, and supplies obtained from other establishments of the respondent's company. Payments represent the amount paid after discounts.
- payments for materials, components, and supplies used by the reporting establishments in the construction of new plants or equipment for themselves, which are chargeable to their fixed assets accounts, are included in this item as are payments for materials bought and resold to others.
- payments made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Payments for materials, components, and supplies include only payments for physical goods and represent the amount paid after discounts.

Excluded from this item are:

- services such as advertising, telephone, telegraph and cable, insurance, developmental and research services of engineering, management, marketing, and other professional consultants, unless their costs are included in the prices paid for materials.
- overhead items such as depreciation charges against plant and equipment, rent and rental allowances, interest payments, royalties, patent fees, payments for land, rental of construction machinery or equipment, and construction work let out to other construction contractors.
- materials furnished to contractors by the owners of projects.

Payments for construction work subcontracted to others include:

- all payments made during 1982 for construction work subcontracted out to other construction contractors. General contractors were instructed to include payments to subcontractors. Builders were instructed to include payments made to general contractors and also payments made directly to subcontractors.
- special trade contractors were instructed to include payments made to other subcontractors. The payments made by the reporting establishment for its purchases of materials, components, and supplies are not included here, even if they were provided to a subcontractor for his use. Such purchases are reported under a separate category, "payments for materials, components, and supplies." However, if payments to subcontractors covered materials purchased directly by the subcontractors, then the total of such payments (including material charges) should have been reported in this item.

Excluded from this item are:

- payments made for the rental of construction machinery or equipment.

Payments for selected power, fuels, and lubricants include:

- payments made for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the parent company.
- payments made for natural and manufactured gas, fuel oil, coal and coke products, etc.

Dollar amounts include freight and other direct charges.

Storage capacity for fuels—Data for storage capacity for fuels were collected from heavy construction contractors, other than building construction contractors. Data are published in the detailed statistics tables for the heavy construction industries, i.e., SIC 1611, SIC 1622, SIC 1623, and SIC 1629.

Rental payments for machinery, equipment, and structures—Includes all payments made during 1982 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes payments for the rental of land. It also excludes payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized. Such payments are included in "capital expenditures." It also excludes payments made under agreements which, in effect, are true subcontract construction arrangements; such payments are included in payments for "construction work subcontracted to others."

Selected purchased services—Includes all payments made during 1982 for communication services purchased from other companies or from other establishments of the parent company. It also includes the cost of all repairs made to structures and equipment by outside firms, or from other establishments of the parent companies. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increases the value of property, or the cost of adapting it for another use.

Fixed assets and depreciation—Refers to the value of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on fixed assets and depreciation were collected separately for: (1) structures, additions, and related facilities; (2) machinery and equipment; and (3) the total of both.

Respondents were asked to report the gross book value-acquisition cost (original cost or other basis) at the beginning and at the end of 1982. They were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982.

Capital expenditures—Refers to all costs actually incurred during 1982 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment. Included are payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized.

Respondents were instructed not to include any expenditures actually made prior to, or after 1982. For example, if they began construction of a building for an establishment's own use before 1982 and did not complete it until after 1982, they were to report only those costs actually incurred during 1982.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

- **New structures and related facilities**—Includes the total expenditures during 1982 for new buildings and structures, major additions and alterations to buildings and structures, and other facilities for the reporting establishment's use (such as roads, docks, tracks, parking lots, and fences). It excludes expenditures for land.
- **New machinery and equipment**—Includes expenditures for new machinery and new equipment. This item also includes capitalized repairs and improvements to used machinery and equipment.
- **New automobiles and trucks intended primarily for highway use**—Includes expenditures for new automobiles and trucks and capitalized repairs and improvements to used automobiles and trucks.
- **Used structures and related facilities**—Covers expenditures for used structures and related facilities acquired from others.
- **Used machinery and equipment**—Includes expenditures for used machinery and equipment acquired from others, including automobiles and trucks. Capitalized repairs and improvements to such equipment are reported as new machinery and equipment.

Value of inventories—Includes all of the materials and supplies that are owned and located within the United States. Excludes materials which are owned by others, but held by the reporting establishment.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Establishments building structures on their own land for sale (operative builders) were instructed to include the value of materials on hand at the end of the year but not to include the structures not yet sold or under construction.

Land subdividers and developers were instructed to include the value of materials on hand at the end of the year, but not include land not yet sold or under construction.

Ownership of construction projects—This item shows the distribution of construction receipts by ownership of the project—Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken and not to the financing. Government owned projects cover those owned by the Federal, Commonwealth, or local governments including public authorities and special districts.

Types of construction—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1982. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. However, complex projects consisting of two or more types of buildings, structures, or other facilities are difficult to classify because sufficient information is seldom available. Therefore, respondents were told to classify complex projects by the major function of the total complex.

In addition, heavy construction contractors and special trade contractors were requested to report the percentage of construction receipts derived from new construction work, including additions and alterations, and from maintenance and repair work for each of these types. General building contractors were requested to report the percentage of construction receipts derived from new construction work, from additions and alterations, and from maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of new construction, additions and alterations, and maintenance and repair.

Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (includes townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures other than containing two or more housing units.
- **Other residential buildings**—Includes hotels, motels, dormitories, and other nonhousekeeping residential structures.
- **Bank buildings and other financial institutions**—Includes all buildings which are used primarily to house banks or other financial institutions.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, miniwarehouses, and other storage buildings.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Note that heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are NOT included in this category, but are shown under nonbuilding construction.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices.
- **Other commercial buildings such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, complete shopping centers, department stores, drug stores, restaurants, public garages, and auto service stations.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.

- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social, and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes buildings which are not classified elsewhere, such as fire stations, bus and air passenger terminals, hangars, etc.

Nonbuilding construction:

- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Elevated highways**—Includes roads, highways, and causeways built on structural supports.
- **Bridges**—Includes viaducts, trestles, and overpasses.
- **Tunnels**—Includes highway, pedestrian, and railway tunnels, etc.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.

- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, dikes, and levees.
- **Power and communication transmission lines, towers, and related facilities**—Includes telephone and telegraph lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.
- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipplers and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

Location of construction work—This item includes data for each State in which respondents engaged in construction work and the extent (percent of construction receipts) of that work.

APPENDIX B. Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family Houses	174	Masonry, Stonework, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stonework Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentering and Flooring Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentering Special Trade Contractors
16	CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—GENERAL CONTRACTORS	1752	Floor Laying and Other Floorwork Special Trade Contractors, N.E.C.
161	Highway and Street Construction, Except Elevated Highways	176	Roofing and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors	1761	Roofing and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipe Line, Communication and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, N.E.C.	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting, Paper Hanging, and Decorating Special Trade Contractors	1794	Excavating and Foundation Work Special Trade Contractors
1721	Painting, Paper Hanging, and Decorating Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment Special Trade Contractors, N.E.C.
		1799	Special Trade Contractors, N.E.C.
		6552	SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES

APPENDIX C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

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| <input type="checkbox"/> Manufacturing | <input type="checkbox"/> Agriculture | <input type="checkbox"/> International Statistics |
| <input type="checkbox"/> Mineral Industries | <input type="checkbox"/> County Business Patterns | <input type="checkbox"/> Geography |
| <input type="checkbox"/> Transportation | <input type="checkbox"/> Quarterly Financial Report | <input type="checkbox"/> Guides, Catalogs, etc. |

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PUBLICATION PROGRAM

1982 CENSUS OF CONSTRUCTION INDUSTRIES

Publications of the 1982 Census of Construction Industries, containing data on construction establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

Preliminary Reports

Preliminary data from the 1982 census have been issued in 27 industry reports and 1 summary report. These reports are superseded by more detailed final reports.

Final Reports

Final detailed statistics are issued in separate paperbound reports.

Industry series—28 reports (CC82-I-1 to -28)

Industry series—27 reports (CC82-I-1 to -27). These reports present data for establishments with payroll and are published for each of the 27 industries included in the census. Each industry report presents 1982 data by State and for the United States on number of construction establishments; receipts; employment; hours worked; payrolls; payments to subcontractors; payments for materials, components, and supplies; payments for power and fuels; payments for selected purchased services; payments for the rental of machinery, equipment, and structures; value added; capital expenditures during the year; and depreciable assets. Limited data for 1977, 1972, and 1967 are also shown. In addition, more detailed data are shown at the U.S. level on construction receipts by type of structure (single-family houses, streets, roads, etc.). Selected data also are provided for establishments classified by their employment size and receipts size.

U.S. Summary—1 report (CC82-I-28). This report summarizes the data for establishments with payroll presented in the 27 individual industry reports and presents limited data for establishments with no payroll.

Geographic area series—10 reports (CC82-A-1 to -10)

Division reports (CC82-A-1 to -9). These reports are published for States grouped according to the nine census geographic divisions. Much of the geographic area series data are the same as presented in the

industry series, except here they are organized by State rather than by industry. Similar data also are presented for selected SMSA's. Data are provided for establishments classified by their employment size and receipts size. Data for establishments with no payroll as well as comparative 1977, 1972, and 1967 figures, on a limited basis, also are shown.

U.S. Summary by State (CC82-A-10). This report summarizes the data, as presented in the nine individual geographic division reports, for establishments with and without payroll.

Special series—1 report (CC82-SP-1)

Legal form of organization and type of operation (CC82-SP-1)—This report presents limited data (number of establishments, number of proprietors and working partners, total employment, and total receipts) for construction establishments without payroll, for construction establishments with payroll, and for the aggregate, classified by industry and by legal form of organization. It also contains selected statistics (number of establishments, employment, payrolls, receipts, payments to subcontractors, net construction receipts, and value added) for construction establishments with payroll, classified by industry and by type of operation (multiunit or single-unit) and by legal form of organization.

Final Report Volume

Final paperbound reports subsequently are assembled and reissued in one clothbound volume.

Microfiche

All published data also are available on microfiche.

OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, manufactures, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U.S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

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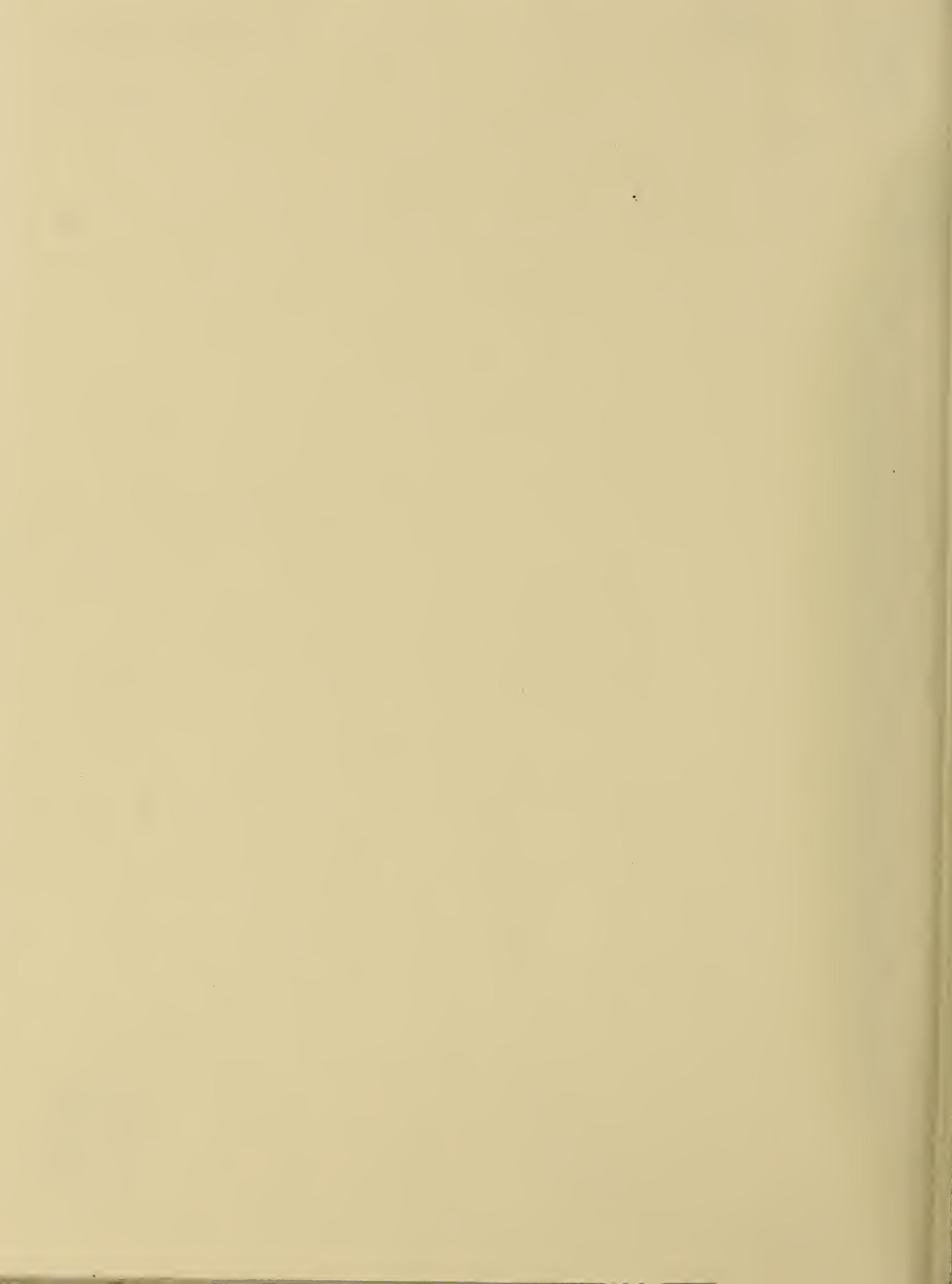
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